

**WORLD VISION, INC.**

**FINAL REPORT**

**SOUTHERN SUDAN FOOD  
SECURITY EMERGENCY  
OPERATIONAL PLAN**

GRANT NUMBER FFP--A-00-99-00088-00

JANUARY 11, 2001

## TABLE OF CONTENTS

LIST OF ABBREVIATIONS .....	2
1.0 EXECUTIVE SUMMARY.....	3
2.0 BACKGROUND.....	5
3.0 PROJECT ACCOMPLISHMENT.....	6
3.1 Program Goal.....	6
3.2 Program Objectives.....	7
4.0 IMPLEMENTATION STRATEGY .....	12
4.1 Building Capacity of Local Counterparts and Staff.....	12
4.2 Agricultural Field Days.....	12
4.3 Crop Trials .....	12
4.4 Contract Farmers.....	13
4.5 Formation of Farmer Cooperative .....	13
4.6 Post Harvest Handling and Storage of Grain.....	13
4.7 Working with Lead Farmers .....	14
4.8 Multiplication of Improved Seed .....	14
4.9 Participation of Women .....	14
5.0 CHALLENGES.....	14
6.0 SUMMARY AND CONCLUSIONS .....	15

## LIST OF ABBREVIATIONS

ACDI	Agricultural Cooperative and Development International
CRS	Catholic Relief Services
DRC	Democratic Republic of Congo
ED	Enterprise Development
FAO	Food and Agricultural Organization
FFP	Food for Peace
LGP	Local Grain Purchase Program
MT	Metric ton
N.E.	North East
NGO	Non-Governmental Organization
SPLA	Sudan Peoples Liberation Army
UG	Uganda
UN	United Nations
UNICEF	United Nations Children Fund
USAID	United State Agency for International Development
WFP	World Food Programme
WV	World Vision
YFA	Yambio Farmers Association
YLC	Yambio Liberation Council

## 1.0 EXECUTIVE SUMMARY

Organization: World Vision, Inc.  
Mailing Address 220 I St. N.E. Suite 270, Washington D.C.

Contact Person: Charles Owubah  
Telephone: 202-608-1886  
Fax: 202-547-3743  
E-mail: [cowubah@worldvision.org](mailto:cowubah@worldvision.org)

Program Title: Southern Sudan Food Security Emergency Operational Plan  
Grant Number: FFP-A-00-99-00088-00  
Country/Region: Southern Sudan  
Disaster/Type: Complex Emergency due to Civil War

### Project Description:

This project aimed at improved food security through three main objectives: increased production of traditional crops and introduction of new varieties, increased access to markets and marketing systems and enhanced capacity of organizations in Yambio county

Project Area: Yambio, Tonj and Gogrial counties of southern Sudan  
Affected Population: Approximately 500,000 persons  
WV Targeted Beneficiaries: 160,000 persons  
Period of Project: March 1999 – April 2000

The Southern Sudan Food Security Emergency Operational Plan was a component of a larger program, the Northern Uganda/Southern Sudan Transitional Activity Program, an innovative initiative, which began in 1997 to promote food security and mitigate conflict in the Horn of Africa. The Sudan Food Security Emergency Operational Plan was specifically designed to strengthen local grain procurement and improve food security in Yambio, Tonj and Gogrial counties of Western Equatoria and Bahr-el-Ghazal regions respectively.

Since World Vision (WV) began humanitarian activities in southern Sudan in 1993, the organization has adopted a multi-sectoral strategy in the provision of services in Western Equatoria and Bahr el Ghazal regions. Specific program areas include food security, water and sanitation, primary health care and emergency relief. The food security sector in particular has evolved from provision of seeds and tools to include activities such as seed trials and multiplication, training of extension workers, ox-plough training, establishment of demonstration farms, local grain purchase (LGP) and enterprise development (ED) activities.

In line with the above trend WV in 1998, sought funding from Food for Peace (FFP) for a transitional program that will enable WV to implement rehabilitation programs in

southern Sudan. South Sudan's rudimentary market system, necessitated monetization of PL 480 Title II commodities in Uganda to support implementation of the program. The first grant secured in 1998 provided a budget of US\$ 957,044 aimed at purchasing 1,000 MT of grain and support to other activities such as demonstration farms and training of extension workers. The 1999 grant, which is the second and final, had a budget of \$US 931,880 and was targeted to procure approximately 1,080 MT of grains and seeds.

The specific goal of the program was to improve the food security of 35,000 vulnerable households in Yambio, Tonj and Gogrial counties of southern Sudan by increasing local production, identifying new marketing channels and strengthening the capacity of local organizations to manage critical components of the program in the future.

Implementation of the program continued until March 2000 when WV, abiding by SPLA's directives, evacuated its staff from SPLA-controlled areas of south Sudan. This resulted from disagreement between non-governmental organizations operating in south Sudan and the Sudan Relief and Rehabilitation Association, the civil wing of SPLA, over the signing of a memorandum of understanding for operating in SPLA-controlled areas.

Despite WV's sudden withdrawal from the project areas during the grant period the program was successful. Many targeted activities were achieved and in some cases the program over performed (table 3). There has been an exponential increase in the production of grain and seed in Yambio and Tonj counties, and because of the local grain purchase program the increased yield has translated into increased incomes for farmers. The seed trial and multiplication components of the program have equally been successful. For example, three additional cassava cultivars, sixteen banana cultivars and coffee and soybean varieties have been successfully introduced into the communities.

The success of the program, in large part, is attributed to an effective dissemination of improved agricultural practices among the farmers. WV trained 220 more lead farmers than was originally planned under the program, enabling many more farmers to be aware of appropriate farming technologies. Fourteen farmer field days were planned but WV was able to organize seventeen, further increasing exposure to best farming practices.

Nevertheless, the program was only able to purchase 322.3 MT of seed and 264 MT of grain as compared with the program target of 1000 MT of grain and 80 MT of seed. This resulted from increased prices of both seeds and grain during the grant period, in effect reducing the purchasing power of the funds available for procurement.

Prior to World Vision's withdrawal from south Sudan, the organization had been training and working with communities to enable them manage the program to ensure its sustainability, but the sudden withdrawal of the organization made it impossible to accomplish all capacity building activities. This may have consequences for the sustainability of the initiatives introduced.

## **2.0 BACKGROUND**

World Vision first arrived in Yambio in 1993 to respond to the needs of about 50,000 returnees from Zaire who had fled the war when Sudan Peoples Liberation Army (SPLA) first attacked and took over Yambio towards the end of 1990. Initially, WV focused on provision of emergency services including primary health care, distribution of relief food, and agricultural recovery.

After the emergency phase, WV was requested by the community to engage in more long-term programs in health and food security. In the primary health program, WV focused its activities on immunization of children under the age of five; treatment of common diseases, health education and training of community based health workers.

In the agricultural sector, high impact interventions were envisaged with a primary focus on three critical areas namely agricultural recovery, enterprise development and local grain purchase program. The agriculture recovery component dealt with seed trial and multiplication, training of extension workers and establishment of demonstration farms. The local grain purchase component dealt with purchasing surplus production from farmers, while the enterprise development component focused on supporting micro-enterprise activities such as tailoring, bicycle repair and establishment of cooperatives.

The local grain purchase program resulted in increased demand for grain, which in turn, increased grain production enabling farmers to exchange surplus grain for basic goods from neighboring countries.

The locally procured surplus grain were later channeled for use in chronically food deficit areas of Bahr el Ghazal, Equatoria and Lakes Province, either through direct WV distribution or through sales to WFP and other NGOs. However by January 1996, the cost of running the LGP program became prohibitive, largely due to high air transport costs and limited markets for barter items.

In 1997, security improved in Western Equatoria with SPLM taking control of the road linking Yambio to Uganda. The opening of the Yambio-Uganda corridor significantly reduced transport cost. It also created new opportunities for communities residing in this area as well as NGOs focusing on the food security sector. These events paved the way for the conceptualization of a wider food security strategy in the Greater Horn of Africa. WV developed plans and designed projects that linked PL 480 Title II resources to longer-term objective of achieving food security through agricultural recovery and improved access to markets. At the same time, the organization maintained its capacity to respond to new emergency situations in the area.

WV developed a transitional program that focused on third country monetization, specifically in Uganda because the rudimentary market system in south Sudan was not conducive to any large-scale monetization program. A joint proposal with WV Uganda was submitted to FFP which facilitated provision of hard red winter wheat, that was sold under a joint monetization agreement with Agricultural Cooperative and Development International (ACDI) to private traders, including the two major grain mills in Uganda.

Proceeds from the sale were used to support the LGP in Yambio in addition to several other food security activities.

The initial impact of the monetization program was positive, resulting in the creation of new sets of needs, including improved farming techniques, new seed varieties, grain storage, transport, financing, as well as improved access to markets. To ensure that communities understood and owned the local grain purchase program, WV began developing their capacities through training. This was done through formation of farmer associations.

The opening of the Yambio-Uganda corridor increased trade between south Sudan and Uganda. Small-scale traders traveling to Yambio increased in number making previously unavailable goods accessible. Unfortunately, WV found itself in direct competition with the traders necessitating an assessment of WV's barter system. The assessment resulted in WV substituting cash (Ugandan currency) for the barter system. The use of cash reactivated the Yambio economy, promoted commerce and catalyzed voluntary return of refugees/traders from neighboring countries such as Uganda and Democratic Republic of Congo (DRC).

Availability of capital in the Yambio economy promoted investment in soap making, bicycle repair, oil pressing and tailoring. The relatively booming economy largely facilitated an increase in cash input in the LGP from US\$165,170 in 1998 to US\$ 334,439 in 2000. In particular, it reactivated trade and movement of people between Uganda and Yambio. Other indirect socio-economic effects include reduction in crime rate and petty theft as most people were engaged in productive activities.

World Vision suspended its activities in SPLA-controlled areas of south Sudan including Yambio in early March 2000 after a disagreement over the signing of a memorandum of understanding between non-governmental organizations and SRRA. To avoid wastage of surplus food from the communities UNICEF and FAO arranged to purchase grain that had already been harvested. As of the end of May 2000, about 150 MT of food had been purchased by the two agencies from farmers. However it has been observed that increased capacity of farmers to market and store produce themselves would greatly improve their ability to manage their own activities with minimal external input.

### **3.0 PROJECT ACCOMPLISHMENT**

#### **3.1 Program Goal**

The overall goal of the monetization program was:  
To improve the food security of 35,000 vulnerable households in Yambio, Tonj and Gogrial counties of southern Sudan by increasing local production, identifying new marketing channels and strengthening the capacity of local organizations to manage critical components of the program in the future.

### 3.2 Program Objectives

The program had three objectives:

#### Objective 1:

14,200 households in 14 payams of Yambio, Tonj and Gogrial counties will enhance their production through the use of improved agricultural practices and a sustained system for acquiring agricultural inputs by April 2000.

#### Objective 2

2000 households in Yambio county will have access to the LGP and new market outlets (both commercially and UN/NGO relief) for surplus production by February 2000.

#### Objective 3

50 farmers and the local administration will enhance their capacity to manage production and marketing systems aimed at ensuring sustainable food security in Yambio, Tonj and Gogrial counties of Southern Sudan by February 2000

By and large, the program was able to achieve the objectives indicated above. Tables 1, 2 and 3 summarize the achievements of the program. Tables 1 and 2 discuss targeted beneficiaries, while table 3 compares objectives to actual accomplishments. The following section provides an overview of factors contributing to the success of the program.

**Table 1: The number of beneficiaries per county during FY99**

Activity	Yambio		Tonj		Gogrial	
	*Exp.	Actual	*Exp.	Actual	*Exp.	Actual
Farmers benefiting directly from improved seed and demonstration plots	2000	5000	12000	12450	200	4630
Farmers engaged and benefiting indirectly from demonstration plots and training in improved farming practices	10000	12000				
Target farmers multiplying seeds on their farmland	1500	3978	500	400	50	Not established
Farmers in LGP program	5000	6500	Nil	Nil		

\*Exp. = Expected.

**Table 2: Vulnerable populations that benefited from grain and seed distribution**

Description	Yambio		Tonj		Gogrial	
	Exp.	Actual	Exp.	Actual	Exp.	Actual
Farmers benefiting from seed and or grain distribution (includes displaced people)	5000	5000	2000	11670	5000	4630

**Table 3: Summary of objectives and achievements during FY 99**

Objective	Activity	Expected output	Actual output	Remarks
Objective 1: 14,200 households in 14 payams will enhance their production through the use of improved agricultural practices and a sustained system for acquiring agricultural inputs by April 2000	Provide agricultural extension to target farmers, increase the number of extension agents from 12 to 24	24 extension agents recruited	Recruited 29 extension agents	Due to the size of certain payams there had to be more extension agents to supervise and assist farmers especially in seed production.
	Utilize 350 local lead farmers for extending new ideas and techniques into communities	Recruit and utilize 350 lead farmers	570 lead farmers identified and used in extension activities	The number of innovative farmers were higher than expected in Yambio
	Conduct one large scale farmers field day in each of the 14 payams and small on farm field days twice a month	To conduct 14 field days and small on-farm field days	Conducted 17 field days  More than 2 small on farm training was conducted in 50% of the payams	Some areas had more farmers than others, hence the increased number of field days in those areas. In other areas, field days were held as dictated by the production season, e.g., during planting, harvesting and training on storage, thus resulting in increased number of field days
	Conduct crop variety trials on maize , sorghum, groundnuts , sunflower and green grams as well as potatoes and cassava at two satellite stations and 14 demonstration gardens	To perform trials for maize, sorghum, groundnuts, sunflower, green grams, cassava and potatoes	The following crop varieties were tried: 19 potato varieties, 6 maize varieties, 6 groundnut varieties, 3 green gram varieties, 6 cassava varieties, 2 bean varieties, 2 soybean varieties, 16 banana varieties, 2 amaranths varieties, 4 pigeon pea varieties	Additional varieties were introduced from trials based on local demand and suitability of the crops. The number of varieties under trial were dependent on the results of the data analyzed from the previous season. The crops were tried for yield, disease and pest resistance, maturity and palatability. Additional trials on storage were set but not implemented due to WV's temporary

				withdrawal from Sudan.
	Prepare seed multiplication contracts for 2050 farmers in Yambio	To prepare contracts for the said number	Seed multiplication contracts were prepared for 3978 farmers	The number of farmers interested in contract seed production increased due mainly to increased seed prices and improved extension outreach
Objective 2 : 2000 households in Yambio county will have access to the local grain purchase program (LGP) and new market outlets (Both commercially and UN/NGO relief) for surplus production by February 2000	Assess additional avenues for grain marketing aside from WV, and work with local authorities to develop systems for accessing these markets	Initiate dialogue among farmers and increase access to potential buyers of grain	Meetings were held with WFP and UNICEF to assist in purchasing grain from farmers	No non-NGO markets were identified and hence the exploration was limited only to WFP and UNICEF. Other NGOs were in the process of being identified shortly before withdrawal. Discussion held with CRS to introduce Grinding mill to add value to produce hence stir local markets for grain trade. Main limitation in the market was lack of infrastructure, especially storage facilities
	Improve information dissemination about the project through the local administration and assess the use of other information channels	Awareness creation through meetings with farmers and local authorities	Meetings were successfully held and awareness created on project activities	Other information channels were not identified, however information dissemination to the local authorities was well undertaken through joint monthly meetings and planning sessions
	Collaborate with Yambio Liberation council (YLC ) a database that will be used for tracking farm production to markets	Database developed	Database could not be developed	Resources such as office space, stationery and personnel were lacking for this activity
	Work with local communities to set up fair prices for grain and seed	To identify and set up fair	Prices of grain and seed revised three times	Prices were dictated by local authorities without

	purchase	market prices	during the year	initiating appropriate dialogue with NGOs. This resulted in less purchases than originally planned, hence high post harvest losses for some farmers as they could not manage to effectively store excess grain.
	Purchase 1,000 metric tones of grain and 80 of seed from the project farmers.	To purchase 1000 MT of grain and 80 MT of seed	264 MT of grain and 322.29 Mt of seed purchased	Total production by farmers was over 1000Mt of seed and 500 Mt of grain.  However all the produce could not be collected due to insufficient funds as occasioned by increased prices. The high production of seed by the farmers was as a result of anticipated high seed prices
	Store grain temporary in Nzara warehouse as well as in cocoons prior to distribution	To store 1080 MT of grain and seed in warehouse and in cocoons	586 MT of seed and grain stored in warehouse and cocoons.	Seeds were stored in both warehouse and in cocoons, but storage capacity was larger than quantities of seed and grain collected
	Provide 50 grain safes to be placed strategically throughout Yambio county for grain and storage handling	Station 50 cocoons strategically	17 cocoons distributed to strategic collection sites	Storage facilities were provided to only interested farmers and groups who could fully use them.  This target was not met due to WV's withdrawal from south Sudan.  Capacity building of

				<p>farmers on the use and maintenance of grain storage and group management were however conducted.</p> <p>Farmers could not manage to meet the subsidized costs of the grain stores and opted to pay for them over more than one season a desire, which was not accomplished due to WV's withdrawal</p>
<p>Objective 3: 50 farmers and local administration will enhance their capacity to manage production and marketing systems aimed at ensuring sustainable food security in Yambio Tonj and Gogrial counties by February 2000</p>	Strengthen capacity of finance center	Training conducted for finance center staff	Three staff members working at the finance center were trained in accounting and bookkeeping	Capacity of center was not fully strengthened due to insufficient funding
	Formally organize to build the capacity of 50 farmers in Yambio county and strengthen the capacity of existing groups	Training conducted for farmers	7 farmer groups trained. Yambio Farmers Association formed by local authorities and farmers	Yambio Farmers Association played an important role in organizing farmer groups during grain collection. This group is likely to play an important role in marketing in Yambio
	Continue to build the capacity of local Sudanese	Training conducted for local Sudanese	Training conducted at all levels of production and management of stores to those involved in the LGP program	At the field level, the program was managed by local Sudanese with limited supervision.

## **4.0 IMPLEMENTATION STRATEGY**

The capacity of any farming community to address external and internal food demand is to a large extent dependent on their ability to effectively utilize their human and natural resources without causing irreversible destruction to the ecosystem. In view of this, WV tailored its interventions to enhance community capacity building and appropriate resource use and management practices.

### **4.1 Building Capacity of Local Counterparts and Staff**

The specific approach used by WV included training of counterpart staff, farmers, and provision of materials such as seeds required for future production and establishment of on-farm trials for screening newly introduced planting materials. Training sessions were also conducted for cooperative officials, community leaders, and finance center staff. Establishment of a finance center and training of the finance center staff was specifically designed to provide banking services in Yambio county. It was also to provide lending services to cooperatives and individuals engaged in various entrepreneurial activities. Loan committees were established in each Payam to advise on potential loan recipients. To provide more liquidity and financial support, farmers had an option of buying shares of the center. Before WV suspended activities, other agencies with programs in Yambio e.g. Catholic Relief Services (CRS) had begun using the finance center. The training sessions were particularly needed in south Sudan where many years of war have destroyed infrastructure and have resulted in migration of relevant expertise in agriculture, business and health to other countries.

Training activities for local counterparts included elements of food security, basic accounting and record keeping specially designed to improve understanding of various agricultural techniques. Such training contributed positively to increased adoption of improved technologies, increased food and seed production, improved quality of produce, and improved social lives of the communities.

### **4.2 Agricultural Field Days**

Field days were specially organized to provide opportunities for farmers, extension workers and WV agronomist to meet and discuss issues affecting agricultural production. WV had planned for one field day for each of the targeted payams, but increased demand resulted in carrying out 17 major field days during the grant period. This was achieved mainly as a result of the increase in the number of extension agents and the increased interest of farmers to acquire more knowledge.

### **4.3 Crop Trials**

During the grant period, WV conducted crop trials resulting on a number of new varieties and crop types. Trials were conducted on sorghum, maize, sunflower, groundnuts, potatoes, cassava and crops such as bananas and rice. Trials were also conducted on legumes such as common beans and soybeans. On-farm trials were conducted in all counties. Three sweet potato varieties were released to farmers as a result of the trial

exercise and cassava cuttings were also distributed to farmers in bulk after three years of adaptability trials. Rice crop (variety Abilong) introduced from Uganda for trials performed very well and was adopted by farmers in the first season of its production.

#### **4.4 Contract Farmers**

Contract documents for seed producing farmers were prepared for 3,978 farmers compared to the targeted 2050. Interest in seed production increased mainly because prices were higher than grain. The increase in the number of contract farmers however did not affect the quality of harvested produce as the number of extension agents was also increased to meet the level of demand from farmers. Also, four extension agents were also assigned the special task of supervising seed producing farmers.

#### **4.5 Formation of Farmer Cooperative**

The formation of farmers' cooperative strengthened the implementation of this grant especially in seed and grain collection. This improved organization by the farmers is an indication that given appropriate knowledge and back up, farmers can manage the seed and grain-handling activities with limited external support.

Regular meetings were held with local authorities such as chiefs and farmers groups. These meetings served as avenues for creating increased awareness on project activities. The meetings were especially useful during planning of different activities such as grain collection and storage. In addition, the meetings facilitated discussions of issues such as the quality of seeds and grain, required standards, post harvest handling and local ownership of project activities.

During the reporting period 137 farmers and seven groups were trained on cooperative management. As a result of this training, Yambio farmers formed the Yambio Farmers Association (YFA) which had interim office bearers shortly before WV withdrew from the project area. The Association's mandate was to co-ordinate marketing of farmers produce and be instrumental in setting up prices. The association was also responsible for ensuring quality produce by farmers and handling of all farmer grievances associated with the production of seed, grain and general farm produce. As part of the strategy to support the finance center the association opened an account at the finance center from funds collected from the members.

#### **4.6 Post Harvest Handling and Storage of Grain**

Post harvest handling and storage remains a challenge for farmers in southern Sudan. To address this, WV proposed to provide storage facilities in the form of grain safes. The plan was to provide farmers with 50 grain safes to be placed at strategic points but this was not fully accomplished. Instead, 17 grain safes and 4 five ton cocoons were distributed to strategic sites in Yambio. The grain safes were distributed only to those farmers who had the financial capacity to purchase them and also those who had adequate production capacity. However, the grain safes were found to be costly especially when

the cost of the items stored in them are compared with the cost of the safes, suggesting that the grain safes may not be appropriate for farmers in the area. Clearly, more appropriate forms of storage facilities need to be developed for south Sudan.

#### **4.7 Working with Lead Farmers**

World Vision worked closely with lead farmers in this program. Use of lead farmers as change agents is an exercise aimed at achieving sustainability as trained lead farmers are able to facilitate dissemination of improved and appropriate technologies. As community members, lead farmers are also able to retain and multiply technologies acquired even after project phase out. The farmer to farmer extension approach used in this program enabled information dissemination by passing down extension messages to other farmers in the community.

#### **4.8 Multiplication of Improved Seed**

WV performed activities leading to seed multiplication of farmer selected varieties. The purpose was to ensure farmers are able to store their own seed for future use. The strategy adopted by the program is to bulk composite seed varieties, which can effectively be stored and multiplied by farmers over many seasons. Farmers were also trained on the preservation of locally available germplasm hence ensuring that they have sufficient stocks of not only introduced but local seed material.

#### **4.9 Participation of Women**

Recognizing the role of women as producers, WV laid emphasis on involving them as lead farmers as well as contract farmers for seed production. In addition, a lady extension agent was recruited to facilitate development of kitchen gardens through training and awareness campaigns. This bore fruit as participation of women in agricultural activities continued to increase. For example, in one Payam the number of women contract farmers increased from 17 to 95.

### **5.0 CHALLENGES**

Pricing of local produce in Yambio changed three times during the grant period. Unfortunately, the prices were not determined by the usual demand and supply interactions, but rather they were dictated by local authorities. Not only were the prices arbitrarily but also they were not in any way reflections of regional grain and seed prices. Although production of seeds and grain during the reporting period increased substantially, and it was expected that collection of produce would by far surpass the 1,080 MT targeted, increased prices did not allow WV to achieve that target. Only 322 MT of seed and 264 MT of grain were collected during the period representing only 20 % of what the farmers had produced for sale.

Establishment of viable commercial markets was hampered by poor infrastructure and unpredictable security situation in south Sudan, which deters potential investors in grain marketing from venturing into the region. Also, inter-clan conflicts continue to affect internal trade. Therefore, limited markets continue to pose a challenge to farmers in Yambio. Given the suitability of Yambio for agricultural production, grain will still remain a key agricultural commodity with a relatively high potential to stir economic growth. Efforts should still be concentrated on grain production and marketing to ensure that it is adequately developed to the benefit of Sudanese.

World Vision's withdrawal from the program areas affected some components of the program including collection of data to establish a database for tracking farm production. Lack of resources such as trained personnel and office equipment also affected the establishment of the database. It is hoped that United Nations Children's Fund (UNICEF) and Food and Agriculture Organization of the United Nations (FAO) will be able to establish a database to monitor agricultural production.

Funding limitations hindered the capacity building of the finance center. It is important to note that even after WV's withdrawal from Yambio, the center continued to offer services to the community. However, the finances that were available could not ensure loaning to the farmers.

## **6.0 SUMMARY AND CONCLUSIONS**

Success of the South Sudan Food Security program is largely due to intentional stimulation of agricultural activity through the use of improved farming systems, introduction of new crop varieties and encouragement of farmers to produce surplus grain for use in other areas of the country. The program focused on short-term emergency needs of the vulnerable population, as well as long-term objectives aimed at ensuring the introduction of more sustainable systems in an emergency period.

This program targeted training of 12 new extension by end of the grant. However, due to increased demand for extension services, WV trained 17 new extension workers. As a result, the number of on-farm field days conducted during the same period increased with each extension agent conducting at least two field days per Payam per month.

The increase in the number of extension agents had a direct impact on the establishment of demonstration farms. The newly trained agents established more demonstration gardens resulting in an increase from 12 to 27 in both Yambio and Tonj counties. Increased access to demonstration gardens and hence an improvement in the dissemination of the appropriate agricultural production technology increased farmers' adoption levels, ultimately resulting in increased crop yields.

Training activities were planned to occur during periods where farmers were likely to learn and gain practical experience. For example, training days were planned to coincide with activities such as harvesting, planting and weeding.

When compared to previous years, there has been an exponential increase in grain and seed production by farmers in both Yambio and Tonj counties. For instance in 1998, WV purchased approximately 900 MT of seeds and grain during two harvesting seasons, but because of increased agricultural production WV planned to procure 1,080 MT of grain and seeds during the second grant period (1999-2000). Unfortunately, due to arbitrary price increases by local authorities and suspension of activities, WV was only able to procure 586 MT resulting in losses by farmers who had increased crop production in anticipation of selling to WV.

There was an increase in the number of beneficiaries for the program, and the resultant increase in production of both grain and seed translated into increased incomes and improved livelihoods for farmers, especially in Yambio where a cash economy exists.

Activities of the LGP program improved gradually over the years and were enhanced by such factors as increased awareness and relatively good security in the area. Since its inception, the program has resulted in positive changes in Yambio county in terms of an increase in currency and trade and a downward trend in crimes as observed by the local authorities. This is mainly due to the fact that farming and small-scale trading activities have fully engaged the youth, reducing idleness and hence time for engagement in unlawful activities.

Capacity building activities such as training of farmers, extension workers and formation of cooperatives implemented in phases over the last three years of operation have also contributed to improved production of grain and seed. Whereas identification of competent personnel during the recruitment of extension workers was difficult it must be noted that the interest of the community in farming activities and the desire to be financially independent has been a driving factor behind the success of the program.

The Local grain purchase program has improved the lifestyles of the communities by providing a market for their surplus grain, and by making improved and appropriate seeds available to the farmers. This has improved food security in the program area. Sustainability of the interventions is however a challenge, and although WV did put in place some mechanisms aimed at achieving sustainability, the MOU impasse and consequently WV's suspension of the program did not allow the mechanisms to mature. It is however hoped that when systems to ensure sustainability are put in place the program will be able to continue exerting positive changes in the lives of the vulnerable and eventually impact the general food security in south Sudan.